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EXAMINER
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ART UNIT	PAPER NUMBER
2154	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/650,254	CHIN, HON WAH
	Examiner	Art Unit	
	Kenny Lin	2154	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7 and 9-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7 and 9-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-5, 7 and 9-21 are presented for examination. Claims 6 and 8 are canceled.

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 6/20/2005 has been entered.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1-5, 7, 9-10, 13-14 and 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Judd et al (Judd), US 5,465,251, in view of Saleh et al (Saleh), US 6,801,496.

5.   Judd and Saleh were cited in the previous office action.

6.   As per claim 1, Judd taught the invention as claimed including an address protocol for

forwarding a message packet from a source node to a destination node along a sequence of

communicatively coupled nodes functioning as a linear chain network (col.2, lines 26-31, col.5,

lines 55-59; strings), the address protocol comprising:

a. A relative source address field programmed with an initial value (0h) at the source

node corresponding to a destination node that is a preselected number of nodes

away from the source node along the linear chain network (col.2, lines 3-18, 32-

41, col.6, lines 33-35, col.7, lines 64-67, col.8, lines 43-50); and

b. a counter that is decremented by a preselected step in value at each node the

message packet is forwarded to along the chain network until the counter reaches

the initial value, thereby indicating that the destination node has been reached

(col.2, lines 3-18, 32-41, col.7, lines 55-63, col.8, lines 44-61; if Hi_digit = 0h;

accept the frame),

c. Wherein the destination node does not require address information in addition to

the counter reaching the initial value to accept the message packet (col.2, lines 36-

39).

7.   Judd did not specifically teach that the counter is incremented in value. However, since

Judd taught that the counter is programmed with the initial value and the counter is **modified** at

each node (col.2, lines 3-18, 31-41), it would have been obvious to increment the counter as a

method of modifying the counter especially since decrementing is simply incrementing negative

values. Saleh taught to increment counters at each node (col.8, lines 44-48). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to combine the

teachings of Judd and Saleh because Saleh's teaching of setting the counter with a zero initial

value and incrementing it at each node enables Judd's method to reach the same result by incrementing counter till it is equal to non-zero initial value instead of counting down to zero.

8.   As per claim 5, Judd taught the invention substantially as claimed including an address protocol for forwarding a message packet from a source node to a destination node along a sequence of communicatively coupled nodes functioning as a linear chain network (col.2, lines 26-31, col.5, lines 55-59; strings), the address protocol comprising:

a. An identifier field containing an identifier to identify the message packet as having a relative address protocol (col.6, lines 14-15);

b. A relative source address field programmed with an initial value at the source node corresponding to a destination node that is a preselected number of nodes away from the source node along the linear chain network (col.2, lines 3-18, 32-41, col.6, lines 33-35, col.7, lines 64-67, col.8, lines 43-50); and

c. a counter that is decreased by a preselected step in value at each node the message packet is forwarded to along the chain network until the counter reaches the initial value, thereby indicating that the destination node has been reached (col.2, lines 3-18, 32-41, col.8, lines 44-61),

d. Wherein the destination node does not require address information in addition to the counter reaching the initial value to accept the message packet (col.2, lines 36-39).

9.   Judd did not specifically teach that the counter is incremented in value. However, since

Judd taught that the counter is programmed with the initial value and the counter is **modified** at

each node (col.2, lines 3-18, 31-41), it would have been obvious to increment the counter as a

method of modifying the counter especially since decrementing is simply incrementing negative

values. Saleh taught to increment counters at each node (col.8, lines 44-48). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to combine the

teachings of Judd and Saleh because Saleh's teaching of setting the counter with a zero initial

value and incrementing it at each node enables Judd's method to reach the same result by

incrementing counter till it is equal to non-zero initial value instead of counting down to zero.

10.   As per claim 14, Judd taught the invention as claimed including a method of sending a

message packet along a portion of a network functioning as a linear chain network from a source

node to a destination node using an address protocol having an identifier to identify the message

packet as having a relative address protocol (col.2, lines 26-31, col.5, lines 55-59, col.6, lines 14-

15), a relative source address field for storing an initial value, and a counter (col.2, lines 3-18,

32-41, col.7, lines 64-67), the method comprising the steps of:

      a.   Selecting the initial value to be a function of a desired number of node hops along

         the linear chain network from the source node (col.2, lines 3-18, 32-41, col.7,

         lines 64-67);

      b.   Programming the relative source address field to have the initial value (col.2, lines

         3-18, 32-41, col.7, lines 64-67);

    c. Adjusting the counter by a preselected step in value at each node that the message

      packet is forwarded to (col.2, lines 3-18, 32-41, col.8, lines 44-61); and

    d. Accepting the message packet at a destination node when the counter value

      reaches the initial value, without requiring address information in addition to the

      counter reaching the initial value to accept the message packet (col.2, lines 3-18,

      32-41, col.8, lines 44-61),

    e. Wherein the preselected step in value is chosen so that the counter reaches the

      initial value when the packet has completed the desired number of node hops

      (col.2, lines 3-18, 32-41, col.8, lines 44-61).

11. Judd did not specifically teach that adjusting the counter is to increment it. However, since Judd taught that the counter is programmed with the initial value and the counter is **modified** at each node (col.2, lines 3-18, 31-41), it would have been obvious to increment the counter as a method of modifying the counter especially since decrementing is simply incrementing negative values. Saleh taught to increment counters at each node (col.8, lines 44-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Judd and Saleh because Saleh's teaching of setting the counter with a zero initial value and incrementing it at each node enables Judd's method to reach the same result by incrementing counter till it is equal to non-zero initial value instead of counting down to zero.

12.   As per claim 18, Judd taught the invention as claimed including a method of sending a

message packet along a chain network having regenerator nodes from a source node to a

destination node using an address protocol having an identifier to identify the message packet as

having a relative address protocol (col.2, lines 26-31, col.5, lines 55-59, col.6, lines 14-15), a

relative source address for storing an initial value, and a counter (col.2, lines 3-18, 32-41, col.7,

lines 64-67), the method comprising the steps of:

        a. Selecting the initial value to be a function of a desired number of node hops along

            the linear chain from the source node (col.2, lines 3-18, 32-41, col.7, lines 64-67);

        b. Adjusting the counter by a preselected step in value at each node that the message

            packet is forwarded to (col.2, lines 3-18, 32-41, col.8, lines 44-61); and

        c. Accepting the message packet at a destination node when the counter value

            reaches the initial value, without requiring address information in addition to the

            counter reaching the trigger value to accept the message packet (col.2, lines 3-18,

            32-41, col.8, lines 44-61),

        d. Wherein the preselected step in value is chosen so that the counter reaches the

            initial value when the packet has completed the desired number of node hops

            (col.2, lines 3-18, 32-41, col.8, lines 44-61).

13.   Judd did not specifically teach that adjusting the counter is to increment it. However,

since Judd taught that the counter is programmed with the initial value and the counter is

modified at each node (col.2, lines 3-18, 31-41), it would have been obvious to increment the

counter as a method of modifying the counter especially since decrementing is simply

incrementing negative values. Saleh taught to increment counters at each node (col.8, lines 44-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Judd and Saleh because Saleh's teaching of setting the counter with a zero initial value and incrementing it at each node enables Judd's method to reach the same result by incrementing counter till it is equal to non-zero initial value instead of counting down to zero.

14.   As per claim 2, Judd and Saleh taught the invention substantially as claimed in claim 1. Judd further taught an identifier field containing an identifier to identify the message packet as having a relative address protocol (col.6, lines 14-15)

15.   As per claims 3 and 4, Judd and Saleh taught the invention substantially as claimed in claims 1 and 2. Judd further taught a relative source destination field containing the initial value (col.6, lines 33-35, col.8, lines 43-50).

16.   As per claim 7, Judd and Saleh taught the invention substantially as claimed in claim 5. Judd further taught that the initial value is an integer having an absolute value equal to the desired number of node hops and the counter is changed by a step in value of one at each node (col.7, lines 64-67). Judd did not specifically teach that the change of the counter is an increment in value. However, since Judd taught that the counter is programmed with the initial value and the counter is **modified** at each node (col.2, lines 3-18, 31-41), it would have been obvious to increment the counter as a method of modifying the counter. Saleh taught to increment counters

at each node (col.8, lines 44-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Judd and Saleh because Saleh's teaching of setting the counter with a zero initial value and incrementing it at each node enables Judd's method to reach the same result by incrementing counter till it is equal to non-zero initial value instead of counting down to zero.

17.   As per claim 9, Judd and Saleh taught the invention substantially as claimed in claim 7. Judd did not specifically teach that the counter is initially set to zero and the counter is counted up by one at each node hop until the initial value is reached. However, since Judd taught that the counter is programmed with the initial value and the counter is **modified** at each node (col.2, lines 3-18, 31-41), it would have been obvious to increment the counter as a method of modifying the counter. Saleh taught to increment counters at each node (col.8, lines 44-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Judd and Saleh because Saleh's teaching of setting the counter with a zero initial value and incrementing it at each node enables Judd's method to reach the same result by incrementing counter till it is equal to non-zero initial value instead of counting down to zero.

18.   As per claim 10, Judd and Saleh taught the invention substantially as claimed in claim 5. Judd further taught that the initial value is a linear function of the desired number of node hops (col.7, lines 64-67).

19.   As per claim 11, Judd and Saleh taught the invention substantially as claimed in claim 5.

Judd further taught that wherein at least one node in the linear chain is a regenerator element

(col.2, lines 31-39, col.8, 43-50).

20.   As per claim 13, Judd and Saleh taught the invention substantially as claimed in claim 5.

Judd further taught that the chain network comprises a portion of a ring network (col.2, lines 26-

31, col.5, lines 61-67, col.6, lines 1; loop).

21.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Judd et al (Judd),

US 5,465,251, and Saleh et al (Saleh), US 6,801,496, in view of "Official Notice".

22.   As per claim 12, Judd and Saleh taught the invention substantially as claimed in claim 5.

Judd and Saleh did not specifically teach that the chain network is a virtual chain network.

Official Notice is taken that the limitations narrowed by this claim is considered obvious and

furthermore a matter of design choice, since applicants have not disclosed that the claimed

limitations solve any stated problem or are of any particular purpose and it appears that the

invention would perform equally well without these claimed features. Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to efficiently

utilize the claimed method in all "types of presenting chain network". Official Notice is taken

that it would have been obvious to implement Judd and Saleh's teaching to all applicable

network environments. It would have been obvious to one of ordinary skill in the art at the time

the invention was made to expand Judd's teaching of using hop counters to transmit packets in

suitable networks such as virtual network, ring network or other applicable network.

23.   Claims 15-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Judd and Saleh as applied to claims 14 and 18 above, and further in view of "Official Notice".

24.   As per claims 15 and 19, Judd and Saleh taught the invention substantially as claimed in

claims 14 and 18. Judd further taught the message packet to comprise a status query message

and further request the destination node to send a status message packet back to the source node

(col.11, lines 15-19). Judd and Saleh did not specifically teach the message packet is sent back

along the chain having a relative source address field and a counter. However, since Judd taught

to use identification field and counter in the message packet, program initial values in hop

counter, adjusting the counter by the preselected step in value at each node that the message

packet is forwarded to, and accepting the message packet when the counter reaches the initial

value (col.2, lines 3-18, 32-41, col.7, lines 64-67, col.8, lines 44-61) and Saleh taught to adjust

the counting by increment the counter, it would is obvious to implement such teachings in the

status message packet as well (destination node becomes initiator). Official Notice is taken that

it would have been obvious to implement the same teaching of using counter and initial value for

returning messages in Judd and Saleh's system (sending package to reverse direction). It would

have been obvious to one of ordinary skill in the art at the time the invention was made to

include Judd and Saleh's teachings of using identification field, counter, counter adjusting and

packet accepting in not only the message packet sent from the source node, but also the status

message packet sent from the destination node back to the source node as well.

25.   As per claim 16, Judd and Saleh taught the invention substantially as claimed in claim 15.

Judd further taught that wherein at least one node in the linear chain is a regenerator element

(col.2, lines 31-39, col.8, 43-50).

26.   As per claim 17, Judd and Saleh taught the invention substantially as claimed in claim 15.

Judd further taught to:

     a. selecting a return message (col.11, lines 15-19);

     b. transmitting the return message in the direction to the source node (col.1, lines 15-

        19);

     c. incrementing the second counter by the preselected step in value at each node that

        the message packet is forwarded to (col.2, lines 3-18, 32-41, col.8, lines 44-61);

        and

     d. accepting the return message packet at the source node when the second counter

        reaches the initial value (col.2, lines 3-18, 32-41, col.7, lines 64-67, col.8, lines

        44-61).

27.   As per claim 20, Judd and Saleh taught the invention substantially as claimed in claim 19.

Judd and Saleh did not specifically teach to send a plurality of the status query messages to a

plurality of destination nodes, the destination nodes corresponding to different initial values

indicating that the destination nodes are each a different number of node hops from the source

node and to receive the status message packets from responding destination nodes; and

determining the relative distance of responding nodes as a function of the initial value

corresponding to each responding node, wherein a fault is isolated to a part of the network

subsequent to the responding active node the greatest number of node hops from the source node.

However, it would have been obvious to send a plurality of status query message to a plurality of

destination nodes and to have the destination nodes to send status message back since Judd

taught to send query message to a destination node (col.2, lines 6-9, col.11, lines 15-19) and to

send acknowledgement message back to the source node (col.1, lines 15-19). Furthermore, it

would have been obvious to use the initial value corresponding to nodes that are each a different

number of node hops from the source node to determine the relative distance of them where

network fault can be isolated subsequent to the farthest node away from the source node.

Official Notice is taken that it would have been obvious to send a plurality of status query

message to a plurality of destination nodes. It would have been obvious to one of ordinary skill

in the art at the time the invention was made to enable the source node in Judd and Saleh's

method to send multiple status query message to multiple destination nodes to obtain status

message and determine relative distance of the nodes.

28.   As per claim 21, Judd and Saleh taught the invention substantially as claimed in claim 14.

Judd further taught the method to comprise the steps of:

    a. Sending a first status query message packet requesting a return status message from a destination node at least one node hope from the source node (col.11, lines 15-19);

    b. Sending at least one subsequent status query message packet requesting a return status message from another destination node corresponding to a different number of node hops from the source node and recording whether the return status message is received at the source node; (col.11, lines 15-19; with different destination).

29.   Judd and Saleh did not specifically teach to detect a fault in a linear chain of regenerator nodes using the relative address protocol; and determine the node the greatest number of node hops from the source node replying to the status query message directed to it, wherein a fault is isolated to a portion of the chain network subsequent to the node the greatest number of node hops from the source node returning the corresponding status message. However, it would have been obvious to use the initial value corresponding to nodes that are each a different number of node hops from the source node to determine the node the greatest number of node hops from the source node where network fault can be isolated subsequent to it. Official Notice is taken that it is obvious that a fault may be detected when subsequent portion of the network of the node the greatest number of node hops from the source node is reached. It would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the source node in Judd and Saleh's method to send multiple status query message to multiple destination nodes to

obtain status message and determine relative distance of the nodes and to detect faults when

exceeds greatest number of node hops from the source node.

Response to Arguments

30.   Applicant's arguments filed 6/20/2005 have been fully considered but they are not

persuasive.

31.   In the remark, applicant argued (1) Judd teaches away from the claimed counter

incrementing. Modifying Judd to increment a counter would not enable Judd to reach the same

results. (2) Judd and Saleh do not teach the limitation of "indicating that the destination node has

been reached." (3) Examiner's reliance on Official Notice are improper since examiner is

merely using official notice to avoid providing any motivation to make the proposed

modification to Judd reference.

32.   Examiner traverse the argument that:

33.   As to point (1), Judd taught the invention as claimed including an address protocol for

forwarding a message packet from a source node to a destination node along a sequence of

communicatively coupled nodes functioning as a linear chain network (col.2, lines 26-31, col.5,

lines 55-59; strings), the address protocol comprising:

    a. A relative source address field programmed with an initial value (0h) at the source

        node corresponding to a destination node that is a preselected number of nodes

away from the source node along the linear chain network (col.2, lines 3-18, 32-

41, col.6, lines 33-35, col.7, lines 64-67, col.8, lines 43-50); and

b. a counter that is decremented by a preselected step in value at each node the

message packet is forwarded to along the chain network until the counter reaches

the initial value, thereby indicating that the destination node has been reached

(col.2, lines 3-18, 32-41, col.7, lines 55-63, col.8, lines 44-61; if Hi_digit = 0h;

accept the frame),

c. Wherein the destination node does not require address information in addition to

the counter reaching the initial value to accept the message packet (col.2, lines 36-

39).

Judd did not specifically teach that the counter is incremented in value. However, since Judd

taught that the counter is programmed with the initial value and the counter is **modified** at each

node (col.2, lines 3-18, 31-41), it would have been obvious to increment the counter as a method

of modifying the counter especially since decrementing is simply incrementing negative values.

Saleh taught to increment counters at each node (col.8, lines 44-48). It would have been obvious

to one of ordinary skill in the art at the time the invention was made to combine the teachings of

Judd and Saleh because Saleh's teaching of setting the counter with a zero initial value and

incrementing it at each node enables Judd's method to reach the same result by incrementing

counter till it is equal to non-zero initial value instead of counting down to zero. Furthermore,

since it is well know that decrementing is simply incrementing negative values, it would have

been obvious to have the counter to increment negative values in Judd's teaching to reach the

preselected initial value.

34.   As to point (2), Judd specifically teach to accept the message packet when the counter

value reaches the preselected initial value (col.2, lines 3-18, 32-41, col.7, lines 55-63, col.8, lines

44-61; if Hi_digit = 0h; accept the frame; where 0h is the initial value and Hi_digit is the counter

value).

35.   As to point (3), the argument was previously addressed. Because Applicants have failed

to challenge any of the Examiner's "Official Notices" stated in the Non-Final office action dated

on 11/30/2004 in a proper and reasonably manner, but rather the motivation in combining the

reference with the "Official Notice" taken, they have been considered as admitted prior art. See

MPEP 2144.03. Motivations to combine Judd's reference with knowledge generally known to

one of ordinary skill in the art can be found in Judd reference itself, hence, the obvious

statements are not a matter of opinion of the examiner but rather suggested in Judd reference.

Regarding claim 9, Judd provided motivation to modify counter values (col.2, lines 3-18). It

would have been obvious to use various mathematical methods to modify the counter values

including incrementing (decrementing negative values) the counter values or using other

mathematical equations. Regarding claim 15 and 19, Judd taught to use identification field and

counter in the message packet, program initial values in hop counter, adjust the counter by the

preselected step in value at each node that the message packet is forwarded to, and accepting the

message packet when the counter reaches the initial value (col.2, lines 3-18, 32-41, col.7, lines

64-67, col.8, lines 44-61), it is obvious to implement such teachings in the status message packet

as well (destination node becomes initiator; reverse the direction of transmission). Official

Notice is taken that it would have been obvious to implement the same teaching of using counter

and initial value for returning messages in Judd's system (sending package to reverse direction).

Regarding claim 20, Judd taught to send query message to a destination node (col.2, lines 6-9,

col.11, lines 15-19) and to send acknowledgement message back to the source node (col.1, lines

15-19). One of ordinary skill in the art would have recognized that it would have been obvious

to send a plurality of status query message to a plurality of destination nodes according to Judd's

teaching of sending messages to different nodes. Judd further taught that at least one node in the

linear chain is a regenerator element and the chain network comprises a portion of a ring network

as claimed in claims 11 and 13 (col.2, lines 26-39, col.5, lines 61-67, col.6, lines 1; loop; col.8,

43-50). Judd and Saleh did not specifically teach that the chain network could be a virtual chain

network as claimed in claim 12. Official Notice is taken that the limitations narrowed by this

claim is considered obvious and furthermore a matter of design choice, since applicants have not

disclosed that the claimed limitations solve any stated problem or are of any particular purpose

or benefits to the invention regarding the chain network being a virtual chain network and it

appears that the invention would perform equally well without these claimed features.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to efficiently utilize the claimed method in all "types of presenting chain network".

Official Notice is taken that it would have been obvious to implement Judd and Saleh's teaching

to all applicable chain network environments. It would have been obvious to one of ordinary

skill in the art at the time the invention was made to expand Judd's teaching of using hop

counters to transmit packets in suitable networks such as virtual network, ring network or other

applicable network.

Conclusion

36.   A shortened statutory period for reply to this Office action is set to expire THREE

MONTHS from the mailing date of this action.

37.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The

examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
July 28, 2005

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